

IN THE CLAIMS:

Amend the following claims:

1. (Currently Amended) A fluorescence observing apparatus having:
an excitation filter unit for transmitting only exciting light with particular ~~wave-lengths~~
wavelengths, of illuminating light; and
an absorption filter unit for transmitting only fluorescent light produced from a specimen
by irradiating the specimen with the exciting light to block the exciting light,
wherein a space between a half-value wavelength on a long-wavelength side of the
excitation filter unit and a half-value wavelength on a short-wavelength side of the absorption
filter unit is in a range of 6-12 nm, and
wherein the excitation filter unit has an ultraviolet cutoff filter formed on a base plate.
2. (Original) A fluorescence observing apparatus according to claim 1, wherein variations in
half-value wavelengths of the excitation filter unit and the absorption filter unit where humidity
is changed from 10% to 95% are within 0.5 nm.
3. (Previously Presented) A fluorescence observing apparatus according to claim 1, wherein the
excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at
least 90 layers.
4. (Previously Presented) A fluorescence observing apparatus according to claim 1, wherein
each of the excitation filter unit and the absorption filter unit includes a multiplayer film
comprised of SiO₂ and Ta₂O₅.
5. (Previously Presented) A fluorescence observing apparatus according to claim 1,
incorporated in an optical system of a microscope.
6. (Previously Presented) A fluorescence observing apparatus according to claim 1,
incorporated in an optical system of an endoscope.

7. (Currently Amended) A fluorescence observing apparatus according to claim 1, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO_2 and Ta_2O_5 , and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 ~~days~~ layers.

8. (Currently Amended) A fluorescence observing apparatus according to claim 1, incorporated in an optical system of a microscope, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO_2 and ~~Ta_2O_5~~ Ta_2O_5 , and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

9. (Currently Amended) A fluorescence observing apparatus according to claim 1, incorporated in an optical system of an endoscope, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO_2 and ~~Ta_2O_5~~ Ta_2O_5 , and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

10. (Previously Presented) A fluorescence observing apparatus according to claim 2, wherein the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

11. (Previously Presented) A fluorescence observing apparatus according to claim 2, wherein each of the excitation filter unit and the absorption filter unit includes a multilayer film comprised of SiO_2 and Ta_2O_5 .

12. (Previously Presented) A fluorescence observing apparatus according to claim 2, incorporated in an optical system of a microscope.

13. (Previously Presented) A fluorescence observing apparatus according to claim 2, incorporated in an optical system of an endoscope.

14. (Currently Amended) A fluorescence observing apparatus according to claim 2, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO_2 and Ta_2O_5 , and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 ~~days~~ layers.

15. (Currently Amended) A fluorescence observing apparatus according to claim 2, incorporated in an optical system of a microscope, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO_2 and ~~Ta_2O_5~~ Ta_2O_5 , and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

16. (Currently Amended) A fluorescence observing apparatus according to claim 2, incorporated in an optical system of an endoscope, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO_2 and ~~Ta_2O_5~~ Ta_2O_5 , and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

17. (New) A fluorescence observing apparatus according to claim 1, wherein the excitation filter unit has an infrared cutoff filter formed on a base plate.

18. (New) A fluorescence observing apparatus according to claim 1, wherein at least one of the excitation filter unit and the absorption filter unit has a filter that cuts off unwanted visible light and that is formed on a base plate.

19. (New) A fluorescence observing apparatus having:

an excitation filter unit for transmitting only exciting light with particular wavelengths, of illuminating light; and

an absorption filter unit for transmitting only fluorescent light produced from a specimen by irradiating the specimen with the exciting light to block the exciting light,

wherein space between a half-value wavelength on a long-wavelength side of the excitation filter unit and a half-value wavelength on a short-wavelength side of the absorption filter unit is in a range of 6-12 nm, and

wherein variations in half-value wavelengths of the excitation filter unit and the absorption filter unit where humidity is changed from 10% to 95% are within 0.5 nm.

20. (New) A fluorescence observing apparatus according to claim 19, wherein the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

21. (New) A fluorescence observing apparatus according to claim 19, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO₂ and Ta₂O₅.

22. (New) A fluorescence observing apparatus according to claim 19, incorporated in an optical system of a microscope.

23. (New) A fluorescence observing apparatus according to claim 19, incorporated in an optical system of an endoscope.

24. (New) A fluorescence observing apparatus according to claim 19, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO₂ and Ta₂O₅, and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

25. (New) A fluorescence observing apparatus according to claim 19, incorporated in an optical system of a microscope, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO₂ and Ta₂O₅, and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.

26. (New) A fluorescence observing apparatus according to claim 19, incorporated in an optical system of an endoscope, wherein each of the excitation filter unit and the absorption filter unit includes a multiplayer film comprised of SiO_2 and Ta_2O_5 , and the excitation filter unit and/or the absorption filter unit includes a multiplayer film comprised of at least 90 layers.